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ABSTRACT

Technical Education Research Centers initiated the Career Change Project to discover, study, and publicize programs that assist adults to make major career changes. The project surveyed by mail and phone 800 businesses and industrial firms, 1500 postsecondary educational institutions and contacted twenty government agencies, professional associations, and labor unions in order to find career change programs. These programs ideally combined career and life counseling, education/training for a new career, job placement services, and follow-up mechanisms. Ten case histories were written to describe programs in four firms, three government agencies, two schools, and a professional association. An overview monograph also was written to present career counseling centers operated by or affiliated with nine postsecondary institutions. The major product of this study was a book entitled "Career Change: A Handbook of Exemplary Programs in Business and Industrial Firms, Educational Institutions, Government Agencies, and Professional Associations." The handbook includes the case histories and monograph along with a general discussion of career change, an individual career change model, and a summary of the survey findings. (LRA/Author)

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FINAL REPORT

PROJECT NO. 498AH60279
GRANT NO. G00-76-05051

TECHNICAL EDUCATION RESEARCH CENTERS, INC.
44 BRATTLE STREET
CAMBRIDGE, MASSACHUSETTS 02138

THE RATIONALE AND PROCESS OF THE CAREER CHANGE PROJECT: CHARACTERISTICS AND CASES OF JOINT INDUSTRY-EDUCATION PROGRAMS ASSISTING EMPLOYEE-SELECTED CAREER CHANGES

MARCH 1979

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
BUREAU OF OCCUPATIONAL AND ADULT EDUCATION

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Final Report

Project No. 498AH60279
Grant No. GOO-76-05051

THE RATIONALE AND PROCESS OF THE CAREER CHANGE PROJECT

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March 1979

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U.S. Department of Health, Education, and Welfare

Office of Education

Bureau of Occupational and Adult Education

PROJECT ABSTRACT

Technical Education Research Centers (TERC) initiated the Career Change Project in order to discover, study and publicize programs that assist adults to make major career changes. The Project was funded by the U.S. Office of Education, Bureau of Occupational and Adult Education in September, 1976, and concluded in March, 1979. Initially, the Project team surveyed by mail and phone 800 business and industrial firms, 1500 postsecondary educational institutions and contacted twenty government agencies, professional associations and labor unions suggested by the project's advisors in order to find career change programs. These programs ideally combined career and life counseling; education/training for a new career; job placement services; and follow-up mechanisms. After making site visits for information gathering, the team members wrote ten case histories to describe programs in four firms, three government agencies, two schools and a professional association. An overview monograph also was written to present career counseling centers operated by or affiliated with nine postsecondary institutions. The case histories and monograph were then condensed to become chapters in an illustrated 212-page book entitled Career Change: A Handbook of Exemplary Programs in Business and Industrial Firms, Educational Institutions, Government Agencies and Professional Associations. This major product of the Project also includes a general discussion of career change, an individual career change model, and a summary of the Project's survey findings as well as paragraph-length descriptions of 29 additional career change programs and a bibliography with over 100 references. Each program description concludes with the address of a contact person for further information. The Handbook includes pictures, charts and other attractive features designed to increase its appeal to continuing education deans, training directors and other people who might be inspired to develop career change programs. Complimentary copies of the Handbook were disseminated to over 1000 people who participated in the survey. Additional copies of the Handbook and copies of the five longest case histories are being distributed at cost upon request. The process of developing these products and the rationale for them are described in the Final Report of the Project.

PREFACE

The Career Change Project was conceived as a means to research and foster programs in education, industry and government that assist adults to make major career changes. We assumed that such programs would help provide new options for people who had become frustrated with their current careers for reasons ranging from involuntary unemployment and low earning potential to boredom at the top of their career ladders and the development of new career interests through avocations. Although such programs were said to be rare or non-existent, we knew of one program and assumed that others could be found. An applied research project was needed to discover these programs and publicize them to firms, schools, government agencies and professional associations which could initiate their own career change programs if inspired to do so by the examples of others.

In view of this need, Technical Education Research Centers (TERC) developed a funding proposal for the "Career Change Project." This proposal was submitted to the U.S. Office of Education, Bureau of Occupational and Adult Education in January, 1976, and was funded in September, 1976. The Project was then initiated with a team of one full-time and three part-time staff members.

The team began the Project with a mail and telephone survey to identify career change programs in the 800 largest business and industrial firms and 1500 largest postsecondary educational institutions in the nation as well as nine government agencies, eight professional associations and three labor organizations recommended by the team's contacts. The programs being sought ideally combined four components: career and life counseling, education/training for a new career, job placement services, and follow-up mechanisms. In eleven organizations, we identified "career change programs" which we selected for further study. Site visits were then made to gather information on them. Case histories were subsequently written on ten of these programs including four in firms, three in government agencies, one in a university, one in a community college and one in a professional association. A monograph also was composed to describe nine

career counseling centers operated by or affiliated with a variety of post-secondary educational institutions in the U. S.

The case histories, monograph and other outputs of the survey were compiled in an illustrated paperbound book entitled Career Change: A Handbook of Exemplary Programs.... Eleven chapters in this Handbook contain condensations of the case histories and monograph. The Handbook also includes other information relevant to career change, beginning with a general introduction to the subject in the first chapter. An individual career change model and a discussion of the support services usually available to career changers are given in the second chapter, while the third chapter discusses the Project's program selection process. Brief descriptions of 29 other noteworthy career change programs are presented at the end of the Handbook, followed by a Bibliography with over 100 references. The Handbook is 212 pages in length, with pictures, charts and other attractive design features.

The Career Change Handbook is intended to provide readers with a general perspective on career change programs currently operated by a variety of organizations in the nation. Hopefully, it also suggests to readers the kinds of program improvements and collaborative mechanisms which are still required if the needs of individual career changers are to be better addressed. Readers who desire more information about the programs portrayed in the Handbook are referred to the five longest case histories produced by the Project and to a contact person listed at the end of each program description.

Since the shorter case histories produced by the Project contained little information beyond that offered by the Handbook, these cases were not finalized for distribution. Consequently, the content-oriented products of the Career Change Project include the Handbook and the five long case histories. The full titles of these six documents are:

Career Change: A Handbook of Exemplary Programs in Business & Industrial Firms, Educational Institutions, Government Agencies and Professional Associations by Paul Ferrini and L. Allen Parker (212 pages printed)

"The Career Change Program of the Washington State Employment Security Department" by Paul Ferrini (57 pages xeroxed)

"The Collaborative Educational Programs of the National Association of Bank Women: Mechanisms for Career Change" by Kirk R. Thomas and L. Allen Parker (72 pages xeroxed)

"The Federal Aviation Administration's Second Career Program" by Paul Ferrini (35 pages xeroxed)

"Mechanisms Facilitating Career Mobility at Tektronix, Inc." by Paul Ferrini (43 pages xeroxed)

"Metropolitan State University: An Institution for Adult Development and Career Change" by L. Allen Parker (131 pages xeroxed)

The final product of the Career Change Project is this report. Since the six content products of the Project contain our findings regarding career change programs, this Final Report is focused instead on the rationale and process of the Project. The Report begins with an elaboration of the rationale for the Project. Section II then gives the Project's objectives and staffing. The actual implementation of the Project is presented in Section III, which includes not only our activities, but also the obstacles we encountered and how we altered the Project's original plan to accomodate them. Section IV recapitulates the major accomplishments of the Project.

I wish to thank the members of our national Advisory Committee for their assistance during the Project. They gave the Project's staff many valuable ideas and references which helped us clarify our program selection criteria and overall perspective on career change. The Advisory Committee included:

Gladys M. Bishop, President, Career Directions Consultants
Vickey L. Cherry, Staff Associate, American Telephone and Telegraph Company
Bill L. Ditto, Executive Dean, Occupational, Technical and Continuing Education, Houston Community College
Alan D. Entine, Assistant Academic Vice-President, State University of New York at Stony Brook
Joseph E. Milano, Program Director, Recognition Programs and Education Relations, IBM Corporation
Shirley H. Rhine, Special Projects Staff, The Conference Board
Richard J. Ungrodt, Vice President of Academic Affairs, Milwaukee School of Engineering

I also would like to acknowledge and thank Paul J. Fermini, Priscilla H. Claman and Kirk R. Thomas, the other staff members of the Project. Marcia Sorcinelli helped us with typing and Charles Maney assisted us with the design and lay-out of the Handbook. Finally, I wish to thank the administrators of the programs described in the Handbook for their cooperation during our information gathering, writing and editing process. Many of them devoted substantial amounts of their own time in helping to make the Project a success.

Cambridge, Massachusetts
March, 1979

L. Allen Parker,
Project Director

THE RATIONALE AND PROCESS OF THE CAREER CHANGE PROJECT

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3. "The Federal Aviation Administration's Second Career Program" by Paul Ferrini

4. "Mechanisms Facilitating Career Mobility at Tektronix, Inc." by Paul Ferrini

5. "Metropolitan State University: An Institution for Adult Development and Career Change" by L. Allen Parker

E. Career Change: A Handbook of Exemplary Programs in Business & Industrial Firms, Educational Institutions, Government Agencies and Professional Associations by Paul Ferrini and L. Allen Parker

I

THE RATIONALE FOR THE PROJECT

The basic concern underlying the "Career Change Project" was expressed in the Project's proposal submitted to the USOE Bureau of Occupational and Adult Education by Technical Education Research Centers (TERC) on 9 January 1976. According to the proposal's "needs statement" (pages 1-4),

> "Managers don't need anyone to tell them that employee alienation exists. Terms such as 'blue-collar blues' and 'salaried drop-outs' are all too familiar." This finding by Richard E. Walton in the Harvard Business Review (1972: page 70) is confirmed by Harold L. Sheppard and Neal Q. Herrick (1972: 158) of the W.E. Upjohn Institute for Employment Research in their extensive analyses of data from several recent surveys:
>
> > In summary, one might say that there is a malaise among a significant portion of white male workers in America--the "blue-collar blues," to use a recently coined journalistic expression. Much of this seems to relate to an urgent and growing need for flexibile or second careers among such persons. The same may be said even for the technician and professional classes in our society. Neither do we exclude the growing numbers of minority group members [and women] of our labor force. (We may be dealing here with a new or growing general symptom of the nature of our industrial or "post-industrial" society.)
>
> .....
>
> Various explanations are given for employee dissatisfaction. Some workers reach the top of the career ladders in their occupations and become bored because they have mastered their work and proved themselves, while some others discover new interests from avocational pursuits. Some employees were pressured by parents or spouses to enter their original occupations, while for some others the original career was determined by job availability rather than personal preference. Better financial rewards, fringe benefits and working conditions are important motivations for some individuals, while still others speak of a desire for more meaningful intrinsic job content or a chance to make greater contributions to society. Approaching occupational obsolescence is also cited as well as changes in attitudes toward work resulting from more widespread formal education, the communications revolution, less authoritarian childrearing, and

increased material security. (See Gooding, 1970; Herzberg, 1973; Kahn, 1972; Sarason, 1975; Sheppard and Herrick, 1972; Special Task Force, 1973; Terkel, 1974; and Walton, 1972.) Willard Wirtz (1975: 10) and his colleagues from business and industry, labor, and education sum up the problem in The Boundless Resource:

> We haven't the vaguest notion of the number of people (only that it is exceedingly large) who come--someplace between the ages of twenty-five and fifty--to a point of significant relization that they ought to be on a different career course, not just as a matter of boredom or frustration or some kind of whim, but as a calculated judgment about improving their worth both to themselves and to the whole system.

A considerable improvement in short-run satisfaction--especially among assembly-line workers--can be made by means of job redesign and work improvement programs such as those described in Walton (1972) and in Fred K. Foulkes' 1969 book published by the American Management Association. However, the economists Hamermesh (1976: 24) and Wool (1973: 42) argue that long-term increases in satisfaction are unlikely due to the basic human trait of rising expectations. Continuing economic development no sooner satisfies certain human desires for goods and services and better job conditions than other wants arise.

This economist perspective is consistent with the needs hierarchy posited by the psychologists Abraham Maslow (1954: chapter 5). Maslow argues that there are five kinds of human needs--psysiological, safety, belonginess/love, esteem, and self-actualization; when the more basic needs are fairly well satisfied, the "higher" needs become important. ...Although Levinson (1968: 215), Frankl (1959: 175) and Kolb (1962: 641) observe human beings striving for ego ideals and existential meaning as well as for self-actualization, they also have views of human nature consistent with the assertion that in the course of economic development new kinds of human concerns will emerge. Colin Wilson's (1972) history of psychology, which emphasizes Maslow and the Post-Freudian Revolution, arrives at a similar conclusion. A more individual statement of the theme can be found in Studs Terkel's (1974: 682) interview with a commercial artist who switched from well-paying work to nonprofit social causes in his late forties:

> I'm struggling to survive. I'm running out of funds. I may have to pimp again for survival's sake. But I'll not give up the sane work.... Once you wake up the human animal you can't put it back to sleep again.

> It might be that workers interviewed by Terkel still are the exception rather than the rule. It might be, as Hamermesh (1976) and Wool (1973) indicate, that wages, fringe benefits and job security still are the prime motivators of most work force members. ...However, the studies referenced in this proposal leave the overall impression that continuing human development is causing significant numbers of adult employees to be discontented with their occupations. The only solution for many of the dissatisfied employees is a change in careers.

In view of the need for some adults to change careers, the TERC proposal went on to discuss some theoretical pros and cons of employers and educators creating programs that would assist adults to make major career changes. These programs were called "career change programs." The ideal career change program was envisioned to involve cooperative arrangements between employers and educators in which the educators provided much of the formal preparation for new careers. Moreover, the proposal emphasized "employee-selected career changes" because these were considered more likely to result in satisfaction than changes forced by involuntary unemployment. (As a result, the title of the project included "Joint Industry-Education Programs Assisting Employee-Selected Career Changes.") Since such programs would result in increased enrollments for educational institutions, the proposal did not dwell on the benefits of career change programs for educators. On the contrary, the benefits and costs for employers were considered at some length (pages 7-9):

> Several employer benefits are among the most likely. Under certain conditions, a dissatisfied employee might become more productive at work upon entering the career change program. At the very least, the morale of the dissatisfied workers should improve, having a positive influence on relations with co-employees. Although the end result might not be increased output, it could at least make the firm a more enjoyable place to work for both the employees and their employer. When graduates of career change programs take employment elsewhere, their positions could be opened to younger workers still seeking to rise on their career ladders. In those cases where the vacated positions are distasteful to all employees, the job would probably

be the kind most amenable to automation or job redesign, e.g., assembly-line work; consequently, employee-selected career changes could reduce worker resistance to automation stemming from a desire for job security. Employee-selected career changes also [could] create both good will among the former employees who benefited from the career changes and good publicity in the employers' communities.

Some program graduates might stay with their employer because of difficulties obtaining jobs in the new career line or out of a sense of loyalty. These employees might eventually use their new skills and knowledge to the employer's benefit in ways that could not have been foreseen by employer or employee. In a society which stresses company loyalty, Japanese firms encourage both employer- and employee-selected continuing education throughout employees' work lives. According to Peter Drucker (1971), the norm of lifelong learning is so well established in Japanese firms that employees are expected to take courses in fields different from their anticipated career paths.... As a result, the Japanese firms accumulate deep pools of diverse skills and knowledge which can make their older workers more productive than their counterparts in the U.S. and Europe. As Drucker argues, the emphasis of Japanese firms on lifelong learning may be a key ingredient of their continued high profitability and growth.

On the other hand, the employer who supports employee-selected career changes ahead of other employers can suffer some heavy costs. Since the career change program could provide skills and knowledge of value to other employers, its graduates could leave to take jobs elsewhere without the other employers reciprocating with graduates from their (non-existent) career change programs. For this reason, the theoretical economic analysis of Becker (1964: 8-20) would dictate that a profit-maximizing firm refuse to support an employee's career preparation that could be transferred to other firms. Why, for example, should an employer help a dissatisfied assembly-line worker to become a machinist unless the employer needs a machinist, can not buy a trained one elsewhere, and knows that the worker will not go elsewhere after retraining? Even if participants in a career change program stay with their employer, why should the employer make the work schedule adjustments, provide the facilities and pay the tuition for a joint industry-education program when the skills and knowledge gained by the employees will be of little or no immediate value to the employer? These are the

kinds of questions which have prevented most American employers from initiating...programs for employee-selected career changes.

The proposal then presented an example of a joint industry-education program in which the benefits appeared to have offset the costs for the employer in assiting workers to make major career changes. This program involved an eight-year collaboration of a Union Carbide plant at Oak Ridge, Tennessee, with the University of Tennessee at Knoxville. No other example was given because we at TERC knew of no other joint program for career change. However, we assumed that others existed in the United States. As a result, the proposal's need statement concluded with the argument that an applied research project was necessary to find, study and publicize twenty "successful" and "less successful" career change programs.

(Parenthetically, it is noteworthy that the Career Change Project was an outgrowth of TERC's Technical Education Reporter. The Union Carbide-University of Tennessee program was called to the Reporter's attention in 1974. In view of our interest in worker alienation and meaningful work, we considered the program to be one of the most significant innovations discovered by the Reporter. The significance seemed so great that a research project was in order to further explore this kind of program. Eighteen months later, the USOE Bureau of Occupational and Adult Education issued grant guidelines that encompassed career change and industry-education cooperation. In response to the guidelines, TERC submitted the proposal that resulted in the initiation of the Career Change Project on September 13, 1976.)

II

PROJECT OBJECTIVES AND STAFFING

In order to identify, study and publicize career change programs, TERC initiated an applied research and dissemination project with nine objectives:

1. To survey top personnel executives in Fortune's 800 largest U.S. firms in manufacturing, banking, insurance, transportation, utilities, merchandising and diversified finance to obtain their opinions of the costs and benefits of joint industry-education programs for employee-selected career changes and to identify "successful" and "less successful" joint programs.

2. To survey the top administrators in 2000 post-secondary educational institutions with adult vocational and technical programs to obtain their opinion on joint programs for employee-selected career changes and to identify "successful" and "less successful" programs....

3. To prepare a Literature Synthesis of existing cases and studies on the need for and problems associated with joint programs....

4. To compile an Opinion Survey Summary of the benefits and problems identified during the surveys so they can become factors to examine during intensive case studies.

5. To collect information for case studies of twenty successful and less successful joint programs....

6. To identify the variables associated with the "successful" and "less successful" joint programs and to write a Summary Comparison....

7. To develop a standard reference format for presenting the twenty case studies and to prepare a Compendium of Case Studies.

8. To prepare and print a Handbook using a readable, illustrated format designed to appeal to top personnel executives and administrators in occupational and continuing education. The Handbook will contain:

   --the Literature Synthesis on the need for joint programs;
   --the Opinion Survey Summary with the findings from the surveys;
   --the Summary Comparison of factors associated with successful and less successful joint programs;
   --five to fifteen chapters portraying successful programs in a manner that makes enjoyable reading and also offers guidelines for the establishment of similar programs;
   --a chapter with brief descriptions of less successful programs;
   --several opinion articles concerning joint programs for employee-selected career changes by leaders in continuing education and in personnel administration.

9. To disseminate the Handbook to ...6,000 employers and educators....

The team employed to achieve these objectives included:

L. Allen Parker, Project Director (paid 50% time for 18.5 months)

Paul J. Ferrini, Project Coordinator (80% time for 18.5 months)

Priscilla H. Claman, Research Associate (20% to 80% time for 15 months)

Kirk R. Thomas, Research Assistant (40% to 80% time for 10 months)

Each of these team members donated from one to six person months of unpaid time to the project in order to overcome unanticipated difficulties during its implementation. These difficulties are sketched in the next section along with the ways in which we overcame them. Without the contributions, the Project would not have been able to achieve its major objectives.

The Project team also drew upon the Project's Advisory Committee, which included:

Gladys M. Bishop, President, Career Directions Consultants

Vickey L. Cherry, Staff Associate, American Telephone and Telegraph Co.

Bill L. Ditto, Executive Dean, Occupational, Technical and Continuing Education, Houston Community College

Alan D. Entine, Assistant Academic Vice-President, State University of New York at Stony Brook

Joseph D. Milano, Program Director, Recognition Programs and Education Relations, IBM Corporation

Shirley H. Rhine, Special Projects Staff, The Conference Board

Richard J. Ungrodt, Vice President of Academic Affairs, Milwaukee School of Engineering

In addition to critiquing questionnaires and some of the project's written documents, the Advisory Committee members attended a one-day meeting eight months into the project. They gave us many valuable ideas and references which helped us clarify our program selection criteria and overall perspective on career change.

III

PROJECT IMPLEMENTATION

The Career Change Project had five major phases. First, we had to find career change programs in business and industrial firms, educational institutions, government agencies, and professional associations. Second, we selected programs for intensive study. Third, we visited eleven programs to collect information on site and wrote complete case histories about ten of these programs. Fourth, we shrank the cases into chapters for the Handbook and composed other chapters for it. Fifth, the Handbook was designed, printed and disseminated as the Project's major product.

Due to the unanticipated difficulties encountered during the five phases, the Project took thirty months rather than the eighteen originally planned. These difficulties are sketched in the rest of this chapter along with the activities carried out in each phase.

Finding the Career Change Programs

The Project team initially developed two pilot questionnaires and covering letters to "Continuing Education Deans" in postsecondary educational institutions and to "Vice Presidents of Personnel" in business and industrial firms. The Educator's Questionnaire contained two sections. The first was devoted to "general questions" aimed at identifying any innovative counseling and continuing education programs that the respondee might have and at discovering linkages between the school and industrial firms, professional-technical associations, labor unions and government agencies. The second section first asked if the school had ever operated a "career change" program. In the questionnaire, we defined "career change program" as a "program which enables employees to prepare for jobs outside their current career areas, whether these jobs exist with their present employer or with other employers." If the respondee answered "yes," he or she was asked to answer additional questions about the program. The "Employer's Questionnaire"

had the same two-part format with the first part focused on innovative human resource development programs and ties with schools, while the second part focused on "career change" programs.

After refining these questionnaires in response to critiques from the Project's Advisory Committee, we mailed copies of the first questionnaire and covering letter to 50 community and junior colleges, technical institutes, and private and public colleges and universities listed in the Education Directory, Colleges & Universities 1975-76, which is compiled by the National Center for Education Statistics of the U.S. Department of Health Education and Welfare. These fifty schools were selected from among 1500 institutions to represent all regions of the nation as well as different kinds of institutions. Earlier, the 1500 institutions had been selected because they had enrollments of 500 or more students and because they listed a school administrator who appeared to be a logical target for our questionnaire, ideally a Dean of Continuing Education. Since the Directory included the titles and names of administrators, we were able to target our mailings to specific individuals. Originally we had planned to mail to 2,000 schools, but found only 1500 that satisfied our criteria.

The second questionnaire and covering letter went to 32 companies randomly selected from among the 800 business and industrial firms that were the largest of their sort in the United States in 1975. These firms included Fortune magazine's listings of the 500 largest U.S. manufacturing corporations, the 50 largest banks, the 50 largest insurance companies, the 50 largest transportation firms, the 50 largest public utilities, the 50 largest merchandising operations, and the 50 largest diversified holding companies. Since we were unable to find a mailing list vendor or directory that included the names of the Vice Presidents of Personnel for the 800 firms, we addressed the covering letters to "Vice President, Personnel" at the main corporate office address.

Nineteen of the fifty schools (38%) responded to the pilot mailing. This return was greater than expected, so we decided that the letters were appropriately

addressed. Moreover, the ninetten respondees appeared to understand the questions. We were somewhat surprised that four of the nineteen indicated the existence of some type of career change program because we had anticipated fewer positive responses. However, we were not sufficiently surprised to question our broad (vague) definition of "career change" program. We therefore finalized the questionnaire with only minor editing. (See Appendix A for a copy of the final questionnaire.)

Only three firms (9.4%) responded to the pilot survey of 32 companies. Since the number of responding firms was considerably lower than the number we anticipated, a follow-up was initiated. Approximately one third of the firms included in the pilot test were contacted by phone to determine the reason for their non-response. Only one of these firms was positive that the questionnaire had been received. In pursuing this further, we realized that the questionnaire probably had been improperly addressed to "Vice President, Personnel." In the majority of the firms contacted by phone, "Education Manager" or "Training Director" was the position with the most direct bearing on career change activities. We consequently decided to use "Education and Training Director" to start off the firms' addresses for the main survey. We also decided to enclose a return-addressed postcard in the industrial mailings which read:

> I have received your Career Change Questionnaire and have forwarded it to the person most qualified to respond to it. This person's name and location is:

These decisions were made after intensive discussions with several Advisory Committee members and other project contacts. In addition, we made some minor modifications in the content of the Employer's Questionnaire and finalized it. (See Appendix B for a copy.)

In January 1977, we mailed the finalized questionnaires to the 1480 post-secondary institutions and 790 business and industrial firms that had not been targeted in the pilot survey or had not responded to it by mail or telephone.

Two months later, we sent a second mailing to schools and firms that had not responded to the pilot survey or the first mailing of the main survey. Since the firms' response rate for the first main mailing was only 10%, we concluded that the title change from "Vice President, Personnel" to "Education and Training Director" had not been effective. Only half a dozen of the return-addressed postcards were sent in by firms, so this mechanisms also appears to have been unproductive. From the pilot test and the two subsequent mailings, we did eventually receive responses from 708 of the 1500 schools (47%) and 143 of the 800 firms (18%). Over one fourth (190 schools) of the responding educational institutions answered positively that they had "career change" programs; almost one fifth of the responding firms (27) also were positive that they had such programs.

This large "positive" response from schools and firms had not been anticipated. However, upon close examination of the "positive" questionnaires from the 190 schools and 27 firms, we concluded that most of their "career change" programs were in fact only programs for career counseling, career development or continuing education. Our guess was that many respondents decided to call a program "career change" if it included some adults who were making major career changes. By contrast, we were looking for programs designed specifically to assist people who were making major career changes. Some of the "negative" respondents included notes which showed that they understood the distinction, but we decided that we had not emphasized it sufficiently in the questionnaire.

As a means to rectify this definitional inadequacy, we decided to send a follow-up letter to all of the "positive" respondents asking them to send us more information about their "career change" programs or to telephone us with the information. Although the follow-up letter did not explicitly include a new definition of "career change" program, the letter requested information about four kinds of activities that, by implication, were part of a career change program as we envisioned it. These activities included: counseling, training, job placement and follow-up contact. We began mailing these "follow-up" letters in

the middle of February. Initial responses to the follow-up letters confirmed our suspicion that, in most cases, "positive" responses did not fit our definition of "career change" programs. By the last week in March, it also became evident that most of the "positive" respondents were not answering the follow-up letter. We then sent a follow-up postcard and explanatory memorandum to these respondents asking them to check one of several alternatives to explain why they did not answer the follow-up letter. The memorandum to the non-answering schools emphasized the distinction between programs designed specifically to help employed adults seeking new careers and programs designed for career advancement or career counseling in general. Similarly, the memo to the firms distinguished between "career development systems" and "career change mechanisms."

In addition to seeking "career change" programs by mail, the project had budgeted to find such programs by telephone calls. We asked Advisory Committee members and other contacts to give us leads to specific programs or to schools and firms that might have programs. We also visited knowledgeable officials at the American Management Association, the Conference Board, the American Society for Training and Development, and the American Council on Education's Project on Noncollegiate Sponsored Instruction. Furthermore, we sought knowledgeable contacts at the 1976 National Conference on Research Management in Vocational-Technical Education and the 1976 convention of the Adult Education Association of the U.S.A.

Most of these visits were fruitful in that we found people interested in the project. However, several of the contacts were skeptical about the likelihood of finding twenty career change programs. One person even was very negative about the logic of the project. Citing some theoretical costs of career change programs (like the costs indicated in our project proposal), he argued that no rational employer would support such a program. Ironically, he did suggest that we contact a specific government agency which proved to have a genuine career change program. Our discovery of both skepticism about career change programs and the existence of genuine programs confirmed our initial sense that a research project was needed

to identify, study and publicize these important innovations in human development and lifelong learning.

During the first nine months of the Project, the Advisory Committee and other contacts suggested 34 postsecondary instititons as likely program sites. Although most of these schools were included in the mail survey, only eight returned questionnaires. All eight wrote that they had a career change program. We telephoned the 34 instititons as well as 35 additional schools from among the 190 "positive" responses to the questionnaire. Twenty-eight firms were suggested by contacts including two firms that already had sent us questionnaire responses saying that they had a career change program and five firms indicating that they had no such program. We eventually telephoned not only these 28 firms, but also most of the 25 other firms that answered the questionnaire positively and three firms that responded ambivalently. In addition, we telephoned or visited 34 contacts in nine government agencies, eight professional associations, seven nonprofit research or service organizations, seven consulting firms, the AFL-CIO, and two labor unions considered to have the most progressive human resources programs in the U.S. Most of these last 34 contacts were made in search of career change programs in government agencies, professional associations and labor unions.

During our mail and phone survey of different kinds of organizations, we became increasingly aware of noteworthy differences among schools, firms, government agencies, professional associations and labor unions. Follow-up phone calls showed that postsecondary educational institutions tended to exaggerate the existence of career change activities when they answered the questionnaires. Apparently, many educators believed that their schools should have special programs for people wishing to make major career changes and that whatever programs they currently offered did facilitate career change and contain adult students making such changes. More often than not, the programs in these schools actually proved to be continuing education courses that happened to have career changers enrolled. These schools were seldom making any special effort to address the unique problems of career

changers.

In contrast, business and industrial firms tended to down-play the extent to which they had developed programs with career changers in mind. Our telephone calls established that many firms were doing more than was indicated by their questionnaire responses. In fact, there were several instances of firms which answered negatively but had interesting programs worth publicizing. Moreover, a number of firms never answered the survey at all but proved to have programs when we telephoned them upon the recommendations of our contacts. Three firms that appeared to have exemplary programs refused to let us study them because they did not want to spend the time for interviews or to have any publicity.

With the major exception of the military services, government agencies generally appear to have less extensive human resource development programs than business and industry has. We consequently had difficulty even finding the people responsible for such programs within different government agencies. However, we eventually did find several government undertakings that appeared to fit our emerging criteria for career change programs.

Almost all of the leads given us to professional associations did prove fruitful in that the staffs or leadership of the associations were beginning to respond to the interest of their members in career change. Several associations were developing or beginning to implement plans for formal committees, centers or projects in this area. However, only one association had a program that had been running for more than a few months. Our contacts in the AFL-CIO indicated that many unions would find career change programs inconsistent with their goals. Since one trade union and one industrial union were recommended for their progressive human resource programs, we contacted them. However, the trade union had no interest in helping people to leave its specialty and thought its attitude would be characteristic of other trade unions. The industrial union saw the potential of a career change program, but had found its membership unwilling to use union dues for such a program or to demand that management start one.

The follow-up letters to the 190 schools and telephone calls to 69 schools required a great deal of unbudgeted time and money. Although the calls to firms and other organizations proved more productive on the average than the calls to schools, they also took time and money. Altogether, the Project lost three months of time and had to pay for extra staff effort during this period in order to send follow-up letters and then telephone 160 organizations. This extra time and money was well spent in that we ended with a much better selection of programs for case studies. However, this loss of time and money contributed to the lengthening of the Project and reduction in the quantity of documents it produced. We eventually distributed only 1200 complimentary copies of the Handbook to people who had participated in the Project rather than to the 6,000 potential recipients of complimentary copies targeted in the Project's proposal (Objective #9). The Literature Synthesis (Objective #3) and the Opinion Survey Summary (Objective #4) also were dropped as separate documents after telephone consultation with the USOE Project Officer; instead, our findings in these areas were incorporated in the three introductory chapters of the Handbook (Objective #8) and in its bibliography.

Selecting Career Change Programs for In-Depth Study

During eight months of surveying for career change programs, we refined our criteria for defining a model career change program and for selecting programs for in-depth study. In May of 1977, we drafted a seven-page paper presenting these criteria. The Advisory Committee responded positively to the paper and we then used it to guide our selection of programs. A condensed and updated version of this paper is presented here:

We used three kinds of criteria to select programs to study in depth. These criteria were:

1 - the extent to which a program assists individuals to make career changes, i.e., is a "career change" program

2 - the kind and number of program components which provide various kinds of assistance in making career changes

3 - the kinds of program data available and the demographic characteristics of the program, e.g., location, size, etc.

Although we prioritized the criteria to some extent, we did not weight them precisely. For example, the geographical location of a program was of minor importance unless we already had four or five programs in the same region and no programs in another region. A program was judged both by the extent to which it satisfied the three kinds of criteria and by its possible contribution to the overall mix of programs selected.

A. Definitional Criteria

As we used the term, a "career change" is a change in occupations which is unusual for the kind of individual making the change. A career change is distinguised from "career development" which involves movement up an established "career ladder" or a common change between two occupations. For example, the career development of a white male bank teller frequently involves taking continuing education courses and on-the-job training in order to become a loan officer and then a bank vice president. A female teller, on the other hand, generally would be making a career change if she were to follow the same sequence, because until recently it was most unusual for a woman to develop such a career path. Similarly, for a male banker to become an elementary teacher would be a career change, unlike the case of an engineer becoming a manager after taking MBA courses at night school. Occupational changes made by young adults without family responsibilities are

more likely to be career exploration than career change, whereas the same changes made ten or twenty years later in their lives probably would be (traumatic) career changes.

In view of these distinctions among career change, career development and career exploration, we encountered three kinds of programs relevant to making career changes. Listed from lowest to highest priority, they were:

1) Low priority - programs which were not initiated for career changers but which could help them if any became involved.

2) Medium priority - programs which were not initiated for career changers but which did have some career changers involved and made some conscious adaptations to accomodate these people.

3) High priority - programs initiated specifically to assist career changers.

.....

B. Program Component Criteria

We found that career change programs have components designed to assist individuals with different kinds of problems encountered during the process of making career changes. Very few programs had components which provided all of the kinds of assistance needed by some career changers. However, every program assisted some career changers part or all of the way through their career transitions. As a result, we could prioritize programs according to how many components they had and the apparent quality or importance of the components. A program with a full range of components for assisting career changers would have five major kinds of components: a) counseling, b) linkage between counseling and education/training, c) education and/or training programs, d) job placement services, and e) follow-up after job placement. [These components are elaborated in chapter 2 of Career Change: A Handbook of Exemplary Programs..., the major product of this Project.]

.....

C. Demographic, Data and Other Criteria

In addition to program components, the quality of a program's data and its demographic characteristics were important to providing an instructive mix of cases. Moreover, certain factors were taken into account to satisfy the current policy thrusts of the USOE Bureau of Occupational and Adult Education. These criteria were divided into four groups: 1) High priority criteria, 2) USOE priorities, 3) Demographic factors, and 4) Other possible criteria.

1. High Priority Criteria
   a) Variety of program types
   b) Fairly equal mix of school, firm and government agency programs
   c) Variety of industries among the firms and agency programs
2. U.S. Office of Education Priorities
   a) Joint employer-educator programs.
   b) Women's programs
   c) Programs for skilled crafts persons and technicians
3. Demographic Factors
   a) Geographical spread
   b) Age of program
   c) Size of program and number of career changers
   d) Variety of occupations among programs
   e) Nature of career changes being made, e.g., how big
   f) Age range of program participants
   g) Voluntary career changers versus involuntary changers
4. Other Possible Criteria
   a) Include both "successful" and "less successful" programs
   b) Exclude discontinued programs
   c) Exclude programs remaining dependent on outside funding even after start-up period
   d) Emphasize if program has been (or can be) duplicated
   e) Exclude programs which have been written about elsewhere
   f) Include programs which would be exciting for the Handbook

Late in the process of developing definitions and criteria for career change programs, we were able to compile a table showing the tentative results of our continued probes to learn more about the programs in the 190 schools that had responded positively to the original Educator's Questionnaire. This chart (see Table I) also included the results of our phone calls to the 26 additional schools suggested by the Advisory Committee and other Project contacts. In Table I, not that 100 of the 190 schools did not answer either of our follow-up mail probes. Assuming that these schools no longer considered their programs to be "career change" programs, we used the limited data from the original questionnaire to place them tentatively in several categories for identification. Our "guestimate" classifications included the following: a) continuing education programs, b) general career counseling programs, c) career counseling for women, d) general management programs, e) management programs for women, f) programs for minorities and the unemployed, and g) unknown types of programs. Similarly, on the basis of

TABLE I

CAREER CHANGE PROJECT

Types of Programs in SCHOOLS Saying They Have "Career Change" Programs*

(Also classifies programs in Schools which did not respond to the mail survey but were suggested by Project contacts)

	NO Follow-Up Received* Program deleted	Follow-Up Received Program deleted	Program Pursued by Telephone	Total Programs from SURVEY	Programs Suggested by Contacts of Project	TOTALS: Program Types
Continuing Education Programs	36	30	16	82	6	88
General Career Counseling	18	6	5	29	2	31
Career Counseling Women (mostly)	7	1	6	14	10	24
General Management Programs	4	1	7	12	1	13
Management Programs for Women	4	—	3	7	2	9
Minorities and Unemployed	9	4	2	15	1	16
Unknown Types of Programs	22	5	4	31	4	35
TOTALS	100	47	43	190	26	216

* Project sent follow-up questionnaires to all schools which said they had "career change" programs in order to determine the primary focus of the program. Due to lack of follow-up response, the classifications often are "guestimates."

the follow-up information provided by 47 schools and telephone calls to an additional 43, we were able to classify the rest of the schools that had originally said they had "career change" programs. By the end of this process, we eliminated almost all of the schools from further consideration. They simply did not have "career change" programs as we defined them -- namely, a program combining career counseling with occupational preparation and some kind of job placement services.

Similar definitions were used to sort programs in business and industrial firms, government agencies and professional associations. In the end we were able to list all of the schools, firms and other kinds of organizations that had programs sufficiently developed to be serious candidates for inclusion in the case studies or the Career Change Handbook. Table II shows these organizations; they are divided into three categories according to the means by which we learned that they had relevant programs. Among the programs in the fifty organizations, ten were discovered by the mail survey alone, seven by both the survey and networks of contacts, and 33 solely through the suggestions of contacts. Thus, networks of contacts proved to be the most effective means to identify career change programs.

After identifying the fifty programs that had some or all of the traits we sought in a career change program, we selected twelve programs for full-length case histories. This selection process was not completed until shortly after we discussed options with the USOE Project Officer who visited us on August 19, 1977. The selected programs included six in business and industrial firms, two in educational institutions, three in government agencies, and one in a professional association. Knowing that we lacked resources to write about all six programs in business and industry, we dropped one of the programs after an initial on-site round of interviews demonstrated that it probably would have made a marginal case. (Another industrial program was later dropped for reasons explained in the next section of this report.) Several additional educational institutions had programs that we would have studied if we had had more time and resources. Moreover, we found many counseling centers in educational institutions that purposely counseled

TABLE II

Source of Leads to Organizations for Case Histories or Handbook

A--Mail Survey	
**Drake University, Community Career Center for Women	Des Moines, IA
George Mason University	Fairfax, VA
Marylhurst Education Center	Marylhurst, OR
New York Institute of Technology	New York, NY
**North Hennepin Community College, Career Clinic	Minneapolis, MN
**Saginaw Valley State College, Chrysallis Center	University Center, MI
**University of Arizona, Opportunities for Women	Tucson, AZ
University of Missouri at St. Louis	St. Louis, MO
NORTHERN STATES POWER	Minneapolis, MN
SEATTLE FIRST NATIONAL BANK	Seattle, WA
*TEKTRONIX, INC.	Beaverton, OR
UNION CARBIDE, Chemicals and Plastics Division	New York, NY
B--Mail Survey and Suggestions of Contacts	
Houston Community College	Houston, TX
New School for Social Research	New York, NY
Pace University	New York, NY
BOEING COMPANY	Seattle, WA
3M COMPANY	St. Paul, MN
*National Association of Bank Women & Simmons College	Boston, MA
*Washington State Employment Security, Career Change Program	Olympia, WA
C--Programs Found Through Suggestions of Contacts	
Adelphi University	Garden City, NY
George Washington University	Washington, DC
Illinois State University, Human Potential Center	Normal, IL
*Jamestown Community College	Jamestown, NY
John F. Kennedy University	Orinda, CA
*Metropolitan State University	St. Paul, MN
**Miami Dade Community College, Greater Miami Center for the Continuing Education of Women	Miami, FL
New York State Education Department, Rockefeller Foundation Project	New York, NY
Northeastern University, Women's Careers Project	Boston, MA

CONTINUED

S.U.N.Y. Central Administration, Faculty Retraining Program	Albany, NY
**S.U.N.Y. at Stony Brook, Mid-Career Counseling Center	Stony Brook, NY
**U.C.L.A. Center for the Continuing Education of Women	Los Angeles, CA
**University of Michigan, Center for the Continuing Education of Women	Ann Arbor, MI
University of the State of New York, Doctoral Program	Albany, NY
University of the State of New York, Regents External Degree Program	Albany, NY
University of Utah, Human Resources Institute	Salt Lake City, UT
AETNA INSURANCE COMPANY	Hartford, CT
*ANONYMOUS COMPANY	----------
BURLINGTON INDUSTRIES	Greensboro, NC
CENTRAL BROADCASTING SYSTEM	New York, NY
*CONNECTICUT GENERAL LIFE INSURANCE COMPANY	Hartford, CT
GENERAL ELECTRIC COMPANY	Ossining, NY
IBM CORPORATION	San Jose, CA
KIMBERLY-CLARK CORPORATION	Neenah, WI
MEDTRONICS, INC.	Minneapolis, MN
NEW YORK TELEPHONE	New York, NY
*POLAROID CORPORATION	Cambridge, MA
TRW SYSTEMS, INC.	Redondo Beach, CA
Model Education Program	Denver, CO
Port Authority of New York and New Jersey	New York, NY
**Rockland County Guidance Center for Women	Nyack, NY
United Automobile Workers	Detroit, MI
*U.S. Army Education Center	Ft. Belvoir, VA
*U.S. Federal Aviation Administration	Washington, DC

*Organization with a program selected for a case history as well as a chapter in Career Change: A Handbook of Exemplary Programs...

**Educational institution or county agency with counseling center sketched as part of the counseling center chapter in Career Change: A Handbook of Exemplary Programs...

career changers. Since these centers generally lacked full-fledged educational and job placement activities as well, we did not think they deserved full-length case histories. However, in view of their services to career changers, especially women, we decided to compile a composit monograph overviewing these centers and giving several-paragraph descriptions of each of nine centers. We also planned to include paragraph-long sketches of the remaining programs among the fifty organizations; these sketches would come in the concluding chapter of the envisioned Handbook.

Only one program out of fifty was clearly a joint industry-education program --the program of the National Association of Bank Women (NABW). This program was especially impressive because it involved not only three colleges and extensive support from banks, but also a professional association acting as broker. Several other programs involved formal ties between employers and educators, but one party or the other dominated the relationship. Consequently, we discontinued the emphasis of the Project on joint programs except for giving the NABW program two chapters in the Handbook rather than the one alloted to other case histories.

The NABW program also helped satisfy the proposal's stress on career change programs for women. Additional stress came from the composit monograph on career counseling centers because eight of the nine centers began as centers designed only for women. Furthermore, the Anonymous Company and Washington State programs have special components for women and minorities.

There appeared to be considerable variation in effectiveness and efficiency among the fifty programs that would permit us to study them. However, these programs were so disparate that it was impossible to determine which programs were "successful" and which "less successful." The prospect of making comparisons was further limited by the recent origin of many programs. We instead decided to study intensively only the eleven full-fledged programs that appeared to be successful. Thus, we were forced to drop the Summary Comparison (Objective #6) from the original objectives envisioned in the Project's proposal.

Site Visits and Case History Writing

During July 1977, we developed a format for the case histories of career change programs and a twenty-page list of possible questions to use during on-site interviews. We then began visiting the eleven organizations starred in Table II which we had selected for full-length studies. These organizations included:

Anonymous Company in New York City

Connecticut General Life Insurance Company in Hartford, Connecticut

Federal Aviation Administration, New England Region, near Boston

Jamestown Community College in Jamestown, New York

National Association of Bank Women, Boston branch, and its cooperative programs at Simmons College in Boston, Mundelein College in Chicago and Pitzer College in Claremont, California

Metropolitan State University in Minneapolis-St. Paul, Minnesota

Polaroid Corporation in Cambridge, Massachusetts

Tektronix, Inc. in Beaverton, Oregon

Union Carbide Corporation, Chemicals and Plastics Division, New York City

U.S. Army Education Center at Fort Belvoir, Virginia

Washington State Career Change Program in Olympia, Washington

We also arranged extensive telephone interviews with the nine career counseling centers selected for inclusion in the monograph on counseling centers that assist career changers. These centers included:

Career Clinic, North Hennepin Community College in Minneapolis

Center for the Continuing Education of Women, U.C.L.A. Extension

Center for the Continuing Education of Women, University of Michigan

Chrysallis Center, Saginaw Valley State College in Michigan

Community Career Center for Women, Drake University in Des Moines

Greater Miami Center for the Continuing Education of Women, Miami Dade Community College

Mid-Career Counseling Program, S.U.N.Y. at Stony Brook

Opportunities for Women, University of Arizona in Tucson

Rockland (New York) County Guidance Center for Women

The information gathering for the case histories was carried out without obstacles in the government agencies, educational institutions, counseling centers and one industrial firm. By contrast, data collection in the other four firms was problematic from the start. It was difficult to arrange interviews with the key

people heading the firms' programs and they in turn often were reluctant to help us arrange interviews with other people in their firms. As we had been told by several firms during our survey, there is a widespread norm in business and industry that interviews by researchers from educationally-oriented organizations are not likely to contribute to a firm's profits. Key interviewees in the firms kept postponing planned interviews and said they were reluctant to ask their colleagues to give us time. The interviewees in firms also tended to be more cautious about discussing their problems than were the interviewees in other kinds of organizations. To our surprise, by comparison, representatives from the three government agencies were willing to talk at length about difficulties and even failures, although they did delete some of this "sensitive" information when we sent them confidential first-draft case histories. However, they deleted far less than the interviewees in two or three firms about which less negative material had been written from the start. In Anonymous Company, a disagreement emerged between key interviewees concerning several major incidents in the history of the firm's career change program; consequently, we eventually were forced to make the case anonymous. The Union Carbide case was lost completely because the key interviewee was laid off and we could not find another person in the firm who would serve as our contact.

Case history writing regarding several of the organizations was further complicated by the complexity of the programs we discovered when we arrived on site. Much more time was required to unravel the complexity than had been planned for the cases. Very long case histories resulted in two instances (72 and 131 pages). Although other cases were shorter, they proved very difficult to write. In the end, the information gathering and case history writing took ten months rather than the six originally planned.

When we began developing the Handbook later during the case history writing, it also became evident that several of the case histories contained little more information than would be included in the Handbook chapters about the programs. Thus, many of the case histories in the planned "Compendium of Case Studies"

(Objective #7) would be little different from the chapters about the same programs in the Handbook. Since we already lacked money to develop and disseminate complimentary copies of the Compendium, we decided to discontinue our efforts to compile one. Instead, we would produce the Handbook plus the five longest case histories. The Handbook would contain chapter-length versions of the long case histories as well as references to the separate documents. All of the other cases would only be presented as chapters in the Handbook. The separate case histories include:

"The Career Change Program of the Washington State Employment Security Department" by Paul Ferrini (57 pages xeroxed)

"The Collaborative Educational Programs at the National Association of Bank Women: Mechanisms for Career Change" by Kirk Thomas and L. Allen Parker (72 pages xeroxed)

"The Federal Aviation Administration's Second Career Program" by Paul Ferrini (35 pages xeroxed)

"Mechanisms Facilitating Career Mobility at Tektronix, Inc" by Paul Ferrini (35 pages xeroxed)

"Metropolitan State University: An Institution for Adult Development and Career Change" by L. Allen Parker (131 pages xeroxed)

Although the monograph on the nine career counseling centers contains considerably more detail than the Handbook chapter on the centers, we decided not to reference the monograph because most readers probably would not find the extra information worth the extra cost of the monograph. However, the monograph is packaged for dissemination, unlike the other shorter case histories.

In December, 1977, we requested a no-cost extension of the project from March 31, 1978, to June 30, 1978. We would have preferred a six month formal extension due to all of the time lost during the process of finding and gathering information about the career change programs. However, we thought that approval of a three-month extension was more likely. We hoped that no new unanticipated difficulties would arise before June 30 and that by then we would complete all of the financial commitments necessary to complete the project. A no-cost extension was feasible because Paul Ferrini and I planned to work without pay on the compilation, proof-reading and dissemination of the Handbook beginning April 1, 1978. The no-cost extension was approved in January, 1978.

Preparing the Career Change Handbook

As Ferrini and I had hoped, the preparation of the Handbook went forward with no major difficulties. See Table III for an outline of the Handbook's contents as it eventually was finalized. The Handbook itself is a self-standing appendix of this Final Report.

We prepared the three introductory chapters of the Handbook first because we considered them to be the most difficult chapters. The first chapter places career change in broad socio-economic and psychological perspective. The second chapter describes the major steps frequently taken by career changers and the kinds of support services they sometimes can obtain from educational institutions and business and industrial firms. The third chapter qualitatively summarizes our survey findings regarding career change programs in business/industry, educational institutions, government agencies, labor unions, associations, and special needs groups such as minorities and women. This chapter also includes one-paragraph sketches of each of the programs to which we devoted an entire chapter later in the Handbook. After jointly planning the introductory chapters, Ferrini wrote first drafts and then edited them in response to my detailed critiques. The Project's Advisory Committee members critiqued a later draft of the three chapters.

Handbook chapters 4 through 9 and 11 through 14 include chapter-length descriptions of exemplary career change programs in different economic sectors. Chapter 10 is a condensation of the monograph on the nine career counseling centers. Although the case histories provided much of the material for these chapters, a great deal of effort went into condensing and rewriting the cases. In several instances, we also had to do some new information gathering. Ferrini took primary responsibility for Chapters 4, 5, 6, 10, 11, 12 and 14, while I took 7, 8, 9, and 13.

The Project's proposal had indicated that the Handbook would include several opinion articles from leaders in the career change field. We did ask three leaders to contribute manuscripts. However, one turned us down because he wished an honorarium and another was unable to meet our time deadline. Dr. Anne Bryant

TABLE III

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*Appendix I is a copy of the Handbook

from the National Association of Bank Women accepted our invitation and Chapter 15 resulted after some rewriting and editing by Ferrini.

Ferrini also drafted the chapter on "Other Noteworthy Programs and Projects." Due to lack of time and money, we were unable to compile annotations for the Bibliography which concludes the Handbook. Instead, we jointly culled the numerous references gathered during the project and listed the over 100 items we thought were most pertinent. As co-editors, we eventually reached agreement on almost every word in the Handbook.

Design, Printing and Dissemination

During June, 1978, we obtained bids from two independent designers and one firm to design, type set and lay out the Handbook. We selected one of the independents, Charles Maney, because he tendered the lowest bid and indicated that he would work extra hours without pay if alterations in the design and lay out proved necessary. Maney said he would complete the job in six weeks, but made no guarantee.

Bids were received in June from four firms on printing and binding the book after receiving camera-ready mechanicals from the designer. We selected the lowest bidder, Halliday Lithograph, even though the firm wanted two or three weeks more to do the job than the other bidders. Halliday would make no guarantee on a completion date.

By the formal conclusion of the Project on June 30, 1978, we wrote purchase orders for the design, printing, mailing, and secretarial services needed to complete the Project. We then began turning the Handbook content over to the designer. Since Ferrini began working on another TERC project, I took primary responsibility for supervising the design and lay out and for monitoring the printing and mailing.

It soon became evident that the designer had under-estimated the time that would be required to design, type set and lay out an high-quality 212 page book

with 15 pictures, 21 shaded boxes, and 9 charts or tables. To further complicate matters, the designer was suddenly swamped with extra work from his regular employer who took priority over his free lance activities. Since the Project had ended financially, we could not pay another designer to assist him. The designer kept his word and did not charge us for his extra time, but he was forced to relegate the job to an occasional evening or weekend. The end result was that the planned six weeks stretched into five months.

In view of repeated design delays, the printer refused to keep rescheduling the printing. We consequently had to wait several weeks for press time. Since the printer could not obtain the color of paper we wanted without further delays, we accepted off-white paper. Otherwise, the printing went forward without difficulty.

On January 30, 1979, the bound Handbooks were delivered to the mailer who disseminated 868 copies during the next two weeks. These copies went to educational institutions and business and industrial firms which had participated in the original survey in early 1977 as well as to scattered individuals in other organizations who had contributed in small ways to the project. During February, we also distributed about 150 copies with personal notes to Advisory Committee members and other people we had interviewed during our data gathering. In most of the 1000 copies of the Handbook, we inserted one-page questionnaires (Appendix C) asking recipients to indicate what they liked most or disliked most about the Handbook. The insert also asked for leads to new career change programs and for an expression of interest in attending a conference or workshop in Boston on career change programs.

Initial response to the Handbook has included profuse praise for its design and content. Orders for case histories and additional Handbook copies have begun to pour in. These orders are being filled at cost since the Project only had resources to print and distribute about 1100 complimentary copies. A number of respondents also wish to attend a conference in Boston. Although we have no immediate plans for such a conference, we see this as a logical follow-on to the Project now completed.

IV

MAJOR ACCOMPLISHMENTS

The Career Change Project verified the basic assumptions made during its conceptualization and delivered its major planned products. At the time the proposal for the Project was written, we had found only one career change program --the kind of complex uncommon innovation we wished to find, study and publicize. In this program, an employer was assisting middle-aged workers to prepare for new careers. The employer accepted that some of the workers probably would leave the firm for jobs elsewhere once the program gave them the experience and credentials necessary to change careers. We assumed that similar career change programs existed in other organizations as well, and that such programs have a plausible socio-economic rationale. The Project satisfied this assumption by finding a variety of career change programs in business and industrial firms, educational institutions, government agencies and a professional association.

We also assumed that many people would not think it possible to develop and maintain an effective and efficient career change program. They would need to be convinced by examples before they would undertake such programs themselves. Therefore, we argued that the Project should not only find and study career change programs, but also publicize them in a well-written, illustrated handbook in order to attract widespread attention. Early in the Project, we did find people who claimed that career change programs would not exist for long because they would prove economically irrational. We also encountered employers and educators who said that they would seriously consider starting such programs if they were given some concrete examples to prove that it could be done. The Project consequently verified our assumption that there was a need not only to find and study career change programs, but also to compile case histories and a handbook to present descriptions of a variety of programs.

The Career Change Handbook we developed to meet this need speaks for itself in design quality and written content. So far, it has been disseminated to over 1000 employers and educators--the majority of them in positions where they could initiate new career change programs. If these potential program founders wish more detailed descriptions of several existing programs, they can order the five case histories produced by the Project and referenced in the Handbook. Additional information about any of the 46 programs portrayed in the Handbook also can be obtained from the contact person listed after each program description.

Initial response to the Career Change Handbook verifies our assumption that an illustrated (expensive) format was appropriate. The Handbook has already strengthened the determination of some employers and educators implementing career change programs. It also has provided new ideas and contacts for improving these programs. Moreover, other employers and educators have indicated that the Handbook inspired them to begin planning new career change programs. As the impact of the Handbook spreads, many other eductional institutions, business and industrial firms, and professional associations should be inspired to begin developing programs for adults who wish to grow, learn and produce in new careers.

V

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APPENDICES

A. Educator's Questionnaire

B. Employer's Questionnaire

C. Questionnaire on TERC's Career Change Handbook

D. Compendium of Cases

1. "The Career Change Program of the Washington State Employment Security Department" by Paul Ferrini

2. "The Collaborative Educational Programs of the National Association of Bank Women: Mechanisms for Career Change" by Kirk R. Thomas and L. Allen Parker

3. "The Federal Aviation Administration's Second Career Program" by Paul Ferrini

4. "Mechanisms Facilitating Career Mobility at Tektronix, Inc." by Paul Ferrini

5. "Metropolitan State University: An Institution for Adult Development and Career Change" by L. Allen Parker

E. Career Change: A Handbook of Exemplary Programs in Business & Industrial Firms, Educational Institutions, Government Agencies and Professional Associations by Paul Ferrini and L. Allen Parker

Please detach for your records.

CAREER CHANGE PROJECT

Description

Employee life-time career needs are an increasing concern for many employers and educators. Job discontent is widespread not only among younger workers, who best exhibit the phenomenon of rising expectations, but also among veteran employees, many of whom have reached the top of their career ladders. The desire for new knowledge, greater job variety and responsibility, better salaries and benefits, and improved working conditions are other factors which motivate employees to consider career changes.

Some employers and educators have responded directly to the changing career concerns of employees by offering training and development options which facilitate career changes. Some of these career change programs have clearly benefited the sponsoring companies and educational institutions, as well as the participating employees. Others have been less successful in realizing their original objectives and cost-effectiveness standards. Some have been offered by employers or educators alone; others have been offered through partnerships which include educational institutions, employers, labor unions, professional and technical societies, trade associations, or government agencies.

Given these variations in program design and effectiveness, Technical Education Research Centers (TERC) has embarked on a major study of career change programs. The project is designed to provide educators and employers with an overview of existing career change activities in the nation, as well as an in-depth look at successful and less successful career change programs. The results of the project will enable developers of career change programs to benefit from the experiences of their predecessors.

In order to identify existing career change programs, TERC will survey 1500 postsecondary educational institutions and the largest 800 manufacturing and service firms in the United States. From the programs identified in the survey, the project staff and advisory committee will select twenty programs for in-depth study and comparison. Case histories of these programs will be compiled, and an illustrated career change handbook will describe exemplary programs, strategies for success, relevant literature, and survey results.

Technical Education Research Centers

TERC is a nonprofit, tax-exempt corporation with headquarters in Cambridge, Massachusetts. An independent research and development center, TERC is supported by grants and contracts from foundations, corporations, and government agencies. Since its founding in 1965, TERC has completed over 70 projects in areas such as Employer-Educator Cooperation, Curriculum Development for New Occupations, Individualized Manpower Training Systems, and Career Education for the Handicapped. The Career Change Project is a significant component of TERC's mission to improve the quality and availability of career relevant education in the United States and abroad.

Project Staff

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Priscilla H. Claman, *Research Associate*

National Advisory Committee

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Joseph E. Milano, *Program Director, Recognition Programs and Education Relations, IBM Corporation*

Shirley H. Rhine, *Special Projects Staff, The Conference Board*

Richard J. Ungrodt, *Vice President of Academic Affairs, Milwaukee School of Engineering*

For Further Information

Career Change Project
Technical Education Research Centers
44 Brattle Street
Cambridge, Massachusetts 02138

Telephone: (617) 547-0430

CAREER CHANGE PROJECT

EMPLOYER'S QUESTIONNAIRE

Name of person completing questionnaire:

Name:_____

Title:_____

Address:_____

_____

Name of person to whom handbook should be sent, if different:

Name:_____

Title:_____

Address:_____

_____

NOTE: *The information elicited in this questionnaire will be used in compiling summary statistics of the survey responses and in identifying career change programs for further study. The identification requested above, in question 9b, question 11b, and at the end of the questionnaire will be used by the project staff only for the purpose of making additional contact with employers operating career change programs.*

SECTION ONE: GENERAL QUESTIONS

1. a) Does your company have any innovative or unusual career development programs for the following groups of employees? Check all which apply.

- ☐ unskilled and semi-skilled workers
- ☐ skilled craftspeople, clerical and service workers
- ☐ technicians and comparable specialists
- ☐ professional employees
- ☐ management and supervisory personnel

b) Why, in your opinion, are these programs innovative or unusual?

2. a) Does your company participate in a training and development program in conjunction with educational institutions, professional-technical-trade associations, labor unions, or government agencies? Check all which apply.

☐ education ☐ associations ☐ labor ☐ government

b) Where is the program offered?

☐ industrial worksite ☐ educational institution ☐ other:_____

3. Is your firm operating or developing an in-house educational program for which employees receive academic credit? ☐ Yes ☐ No

4. Please indicate, by checking the appropriate column, whether your firm operates the following types of programs. Consider a program successful if it has been beneficial to both the company and participating employees. If outcomes have varied among different company units, please check more than one column.

	does not offer	offers as an experiment	offers with success	offers with less success
Tuition aid for: job-relevant courses				
other courses				
Release time for: job-relevant courses				
other self-development				
community service				
Paid manager leave for: job relevant education				
other self-development				
Paid employee leave for: job-relevant education				
other self-development				
Work rotation programs for: managers				
employees				
Problem-solving training for: managers				
employees				
Participatory decision-making for: managers				
employees				
Human Potential Development for: managers				
employees				
Pre-retirement counseling for: managers				
employees				
Career goal setting for: managers				
employees				

5. a) Does your firm offer or participate in any training programs for local groups of chronically unemployed or underemployed persons? ☐ Yes ☐ No

   b) *If yes,* please describe briefly.

6. a) Does your firm offer any unique training programs for women? ☐ Yes ☐ No

   b) *If yes,* does the program involve training or retraining these women for jobs traditionally filled by men? ☐ Yes ☐ No

   c) *If yes,* for which traditionally male occupations are these women being prepared?

7. Looking ahead, what type of new program to improve job performance and increase career satisfaction would you like to see your company offer?

8. a) Has your firm ever operated a "career change" program? ☐ Yes ☐ No

.....

NOTE: *For our purposes we define career change program as a program which enables employees to prepare for jobs outside their current career areas, whether these jobs exist within the sponsoring firm or with other employers.*

.....

   b) *If yes,* please complete the questionnaire by answering Section Two.

   c) *If no,* please complete the questionnaire by indicating in the space below whether your firm has ever considered offering a career change program, and, if so, why the idea was rejected.

SECTION TWO: SPECIFIC QUESTIONS ABOUT YOUR FIRM'S CAREER CHANGE PROGRAM

9. a) Approximately how many of your company's units (in the United States) have operated or currently operate career change programs?

   Approximately _____ units have operated programs

   Approximately _____ units currently operate programs

   b) Please list the office which has offered or currently offers the career change program about which you are most knowledgeable.

   Unit name:_____ This program ☐ is ongoing.

   Address:_____ ☐ is no longer being offered.

   _____

NOTE: *Although we are interested in, and may later contact you about all the career change programs operated by your firm, please refer only to the program you listed in 9b in answering the following questions. Where relevant, please check all items which apply to that program.*

10. Is your firm's career change program designed to meet your firm's workforce needs or to meet your employees' desires, regardless of your workforce needs?

☐ to meet workforce needs ☐ to meet employees' desires

11. a) Is the career change program operated alone or in conjunction with other organizations?

☐ operated alone
☐ with other business/industrial firms
☐ with educational institutions
☐ with professional-technical-trade associations
☐ with labor unions
☐ with government agencies

b) If operated with other organizations, please list them below.

Name:_____ Name:_____

Address:_____ Address:_____

_____ _____

12. Training is offered at the:

☐ worksite ☐ educational institution ☐ other:_____

13. The program is offered:

☐ during working hours ☐ after working hours ☐ during paid leave

14. The program is geared toward:

☐ unskilled and semi-skilled workers
☐ skilled craftspeople, clerical and service workers
☐ technicians and comparable specialists
☐ professional employees
☐ management and supervisory personnel

15. How long has the program been operating?

☐ less than a year ☐ 1-2 years ☐ 3-5 years ☐ more than 5 years

16. a) How many employees have been involved in the career change program since its inception? Approximately _____ employees

b) How many employees have been involved in the program in the calendar year 1976 (or in the last year of the program's operation, if the program was not offered in 1976)? Approximately _____ employees

17. How old are the majority of the employees in the program?

☐ 20-30 ☐ 30-45 ☐ 45 and over

18. a) Does your program include a career counseling component? ☐ Yes ☐ No

b) *If yes,* please describe briefly the counseling services involved.

19. The program is supported by:

☐ federal government funding
☐ state government funding
☐ corporate office funds
☐ operating division funds
☐ other: _____

20. For both your company and participating employees, the career change program is considered to be:

☐ highly successful
☐ moderately successful
☐ disappointing, but worth redesigning
☐ disappointing and not likely to be redesigned
☐ other: _____

21. The program's success was hampered in the following ways:

☐ the program required a disproportionate investment of money and resources
☐ program graduates left the firm when the company had hoped to keep them
☐ the program developed a poor image among employees
☐ the program had difficulty maintaining cooperation with other organizations
☐ other: _____

22. **The program has benefited the firm in the following ways:**

- ☐ by increasing employee productivity in existing jobs
- ☐ by enabling the firm to fulfill its workforce needs
- ☐ by giving the firm a positive image among its employees
- ☐ by giving the firm a good reputation in the community
- ☐ by initiating productive exchanges with educational institutions, professional-technical-trade associations, labor unions, or government agencies
- ☐ other: _____

THANK YOU FOR COOPERATING IN THIS SURVEY. WHOM MIGHT WE CONTACT TO LEARN MORE ABOUT YOUR COMPANY'S CAREER CHANGE PROGRAM(S)?

Name and position: _____

Name of company: _____

Address: _____

Telephone: _____

If you would like us to send a copy of this questionnaire to a specific company office, please indicate below.

☐ Please send a copy of the questionnaire to:

Name and position: _____

Name of company: _____

Address: _____

CAREER CHANGE PROJECT

Description

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For Further Information

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Technical Education Research Centers
44 Brattle Street
Cambridge, Massachusetts 02138

Telephone: (617) 547-0430

CAREER CHANGE PROJECT

EDUCATOR'S QUESTIONNAIRE

Name of person completing questionnaire:

Name: _____

Title: _____

Address: _____

_____

Name of person to whom handbook should be sent, if different:

Name: _____

Title: _____

Address: _____

_____

NOTE: *The information elicited in this questionnaire will be used in compiling summary statistics of the survey responses and in identifying career change programs for further study. The identification requested above, in questions 12b, 13b, and at the end of the questionnaire will be used by the project staff only for the purpose of making additional contact with educators and employers operating career change programs.*

SECTION ONE: GENERAL QUESTIONS

1. Does your school participate in training and development in conjunction with industrial firms, professional and technical societies, trade associations, labor unions, or government agencies? ☐ Yes ☐ No

   If yes, please check all which apply.

   ☐ with industrial firms
   ☐ with professional-technical societies
   ☐ with trade associations
   ☐ with labor unions
   ☐ with government agencies

2. Does your school offer continuing education classes at sites other than the traditional classroom? ☐ Yes ☐ No

   If yes, please indicate where these courses are offered.

   ☐ industrial worksite ☐ community site ☐ other: _____

3. a) Has your school operated or is it currently operating a training program specifically designed to meet the workforce needs of local business or industry? ☐ Yes ☐ No

   b) *If yes,* please describe the role(s) played by business and industry in developing and/or administering this program.

4. Please indicate, by checking the appropriate column, whether your school operates the following types of programs. Consider a program successful if it has been beneficial to both your institution and the program participants. If experiences have varied among different campuses, please check more than one column.

	does not offer	offers experimentally	offers successfully	offers with less success
Remedial education for: students				
non-student public				
Pre-vocational/technical courses				
Competency-based instruction				
Retraining for veteran workers				
OSHA courses and workshops				
Special courses for: labor officials				
business/industry personnel				
civil service workers				
appointed or elected officials				
citizen's groups				
other:_____				
Special courses given by: labor officials				
business/industry personnel				
government officials				
community organizers				
other:_____				
Arts for gainful employment				
Crafts for gainful employment				
Small business management for minorities				
Career counseling services for: students				
non-student public				
Faculty/industry employee exchanges				
Faculty leave for industry experience				

5. a) Does your school have any longstanding (3 years or longer) internship arrangements with business and industrial firms? ☐ Yes ☐ No

   b) *If yes,* do any of these firms guarantee job placement for program graduates? ☐ Yes ☐ No

6. What is the attitude of your school's administration toward recruiting faculty from business and industry?

7. a) Are any of your faculty members involved in course planning with employers? ☐ Yes ☐ No

   b) *If yes,* please describe briefly.

8. a) Has your school ever offered any occupational education programs specifically designed for local groups of chronically unemployed or underemployed persons? ☐ Yes ☐ No

   b) *If yes,* were state or federal government funds used in this program?

   ☐ state funds used ☐ federal funds used ☐ no government funds used

9. a) Does your school offer any unique education programs for women? ☐ Yes ☐ No

   b) *If yes,* does this program involve training or retraining women for jobs traditionally filled by men? ☐ Yes ☐ No

   c) *If yes,* for which occupations are these women being prepared?

10. Looking ahead, what types of new educational program responsive to workforce needs would you like to see your school offer?

11. a) Has your school ever operated a "career change" program? ☐ Yes ☐ No

NOTE: *For our purposes we define career change program as a program which enables employees to prepare for jobs outside their current career areas, whether these jobs exist with their present employers or with other employers.*

   b) *If yes,* please complete the questionnaire by answering Section Two.

   c) *If no,* please complete the questionnaire by indicating in the space below whether your school has ever considered offering a career change program, and, if so, why the idea was rejected.

SECTION TWO: SPECIFIC QUESTIONS ABOUT YOUR INSTITUTION'S CAREER CHANGE PROGRAM

12. a) How many career change programs has your institution offered?

_____ programs during the last 10 years _____ programs now offered

b) Please list the name and address of the program about which you are most knowledgeable, and indicate if the program is still being offered.

Unit name:_____ This program ☐ is ongoing.

Address:_____ ☐ is no longer being offered.

_____

NOTE: *Although we are interested in, and may later contact you about all the career change programs operated by your institution, please refer only to the program you listed above in answering the following questions. Where relevant, please check all items which apply to that program.*

---

13. a) Is the career change program operated by your institution alone, or in conjunction with other organizations. Check all which apply.

☐ operated alone
☐ with other schools
☐ with business/industrial firms
☐ with professional-technical societies
☐ with trade associations
☐ with labor unions
☐ with government agencies

b) If the program is operated in conjunction with other organizations, please list them below.

Name:_____ Name:_____

Address:_____ Address:_____

_____ _____

14. The career change program is designed primarily:

☐ to meet the workforce needs of local employers
☐ to meet the needs of continuing education students
☐ to meet anticipated needs in new and emerging technologies

15. a) Classes are offered at the:

☐ educational institution ☐ industrial worksite ☐ other:_____

b) Classes are scheduled:

☐ at times convenient for employed students
☐ at times convenient for the school
☐ at times mutually agreed on by students, employers, and the school administration

16. The program is geared toward:

- ☐ unskilled and semi-skilled workers
- ☐ skilled craftspeople, clerical and service workers
- ☐ technicians and comparable specialists
- ☐ professional employees
- ☐ management and supervisory personnel

17. This program has been operating:

☐ less than a year ☐ 1-2 years ☐ 3-5 years ☐ more than 5 years

18. a) Approximately _____ employees/students have participated in the career change program since its inception.

b) Approximately _____ employees/students have participated in the program in the calendar year 1976.

19. How old are the majority of the employees/students in the program?

☐ 20-30 ☐ 30-45 ☐ 45 and over

20. a) Does the program include a career counseling component? ☐ Yes ☐ No

b) *If yes*, please describe briefly the type of counseling services involved.

21. a) Does the program include a job placement component? ☐ Yes ☐ No

b) *If yes*, please describe briefly.

22. The program is supported by (check all which apply):

- ☐ tuition
- ☐ federal government funds
- ☐ state government funds
- ☐ business and industry funds
- ☐ foundation funds
- ☐ other:_____

23. For both your school and the program participants, the career change program is considered to be:

- ☐ highly successful
- ☐ moderately successful
- ☐ disappointing, but worth redesigning
- ☐ disappointing and not likely to be redesigned
- ☐ other:_____

24. The program has benefited the institution in the following ways (check all which apply):

- ☐ by increasing student enrollment
- ☐ by insuring the career relevance of occupational courses
- ☐ by giving the school a reputation for responsiveness to the needs of students and employers in the community
- ☐ by initiating productive exchanges with other organizations
- ☐ other: _____

25. The program's success was hampered in the following ways (check all which apply):

- ☐ the placement of program graduates was more difficult than anticipated
- ☐ the program required a disproportionate investment of money and resources
- ☐ the program had difficulty retaining students
- ☐ career guidance and personal counseling services were insufficient
- ☐ the program had difficulty maintaining cooperation with other organizations
- ☐ other: _____

THANK YOU FOR COOPERATING IN THIS SURVEY. WHOM MIGHT WE CONTACT TO LEARN MORE ABOUT YOUR INSTITUTION'S CAREER CHANGE PROGRAM(S)?

Name and position: _____

Address: _____

Phone: _____

If you would like us to send a copy of this questionnaire to another organization with a career change program, please indicate below.

☐ Please send a copy of this questionnaire to:

Name and position: _____

Address: _____

Phone: _____

QUESTIONNAIRE ON TERC'S CAREER CHANGE HANDBOOK

Name: _____ Title: _____

Address: _____

_____

_____ Telephone: _____

1. How does the Handbook compare to what you expected to receive? _____

2. What about the Handbook do you especially like? _____

3. What about the Handbook could be improved to better meet your needs? _____

4. Please name any career change programs not portrayed in the Handbook which you think meet the criteria for a strong all-around program (see chapters 2 & 3).

5. Would you like to attend a conference or workshop in Boston on career change programs similar to those portrayed in the Handbook? _____Yes ____No

   If Yes, please continue answering question 5 on the back side.

HANDBOOK AND CASE HISTORY ORDER FORM

Please send me the following items:	price	number	total
1. Career Change: A Handbook of Exemplary Programs (212 pages printed)	$7.50		
2. "The Career Change Program of the Washington State Employment Security Department" (57 pages xeroxed)	4.60		
3. "The Collaborative Educational Programs of the National Association of Bank Women" (85 pages xerox)	6.80		
4. "The Federal Aviation Administration's Second Career Program" (35 pages xerox)	2.80		
5. "Mechanisms Facilitating Career Mobility at Tektronix" (43 pages xerox)	3.50		
6. "Metropolitan State University: An Institution for Adult Development and Career Change" (124 pp xerox)	9.95		
		TOTAL	_____

Question 5 continued

a) **How long should such a meeting be?**_____

b) **How much would you be willing to pay as a fee to attend a meeting of the length you prefer?** (in addition to room and board)_____

c) **What topics should be covered by the conference or workshop? And, who would you like to lead discussions on the topics, if you have a preference?**

_____

_____

_____

_____

_____

_____

_____

fold along dashed line

Other Comments:

fold along dashed line

Career Change Project
Technical Education Research Centers
44 Brattle Street
Cambridge, Massachusetts 02138

place stamp here

APPENDICES D AND E ARE PACKAGED SEPARATELY